

Amendments to the Claims

1. (Withdrawn) An ancillary tool for positioning and seating a prosthetic acetabulum in an anatomical or prosthetic cavity of a patient's hip, the tool comprising:

a handle for manipulating the acetabulum including a rod provided, adjacent a distal end thereof, with a head move ably mounted on the rod and, at a proximal part of the rod, with an impaction surface for application of a force

an endpiece adapted to be removably connected to said distal end of said distal end of said rod and including an elastically deformable ring that is adapted to received the head therein and that defines both an outer face for engagement with an inner surface of the acetabulum and an opposite inner face for interaction of said endpiece with said head,

wherein when a first force is applied, said head is introduced inside said ring and is urged into engagement with said inner face of said ring to cause an outward radial expansion of said elastically deformable ring relative to a longitudinal axis of said endpiece so that said ring wedges with said inner surface of said acetabulum to permit manipulation and placement of said acetabulum by the handle in said anatomical or prosthetic cavity, and

wherein when a second is subsequently applied on said impaction surface of said rod, said acetabulum is seated within the said anatomical or prosthetic cavity.

2. (Withdrawn) The tool of Claim 1, wherein said elastically deformable ring is radially deformable over substantially an entire periphery thereof.

3. (Withdrawn) The tool of Claim 1, wherein said outer face of said elastically deformable ring constitutes substantially an entire surface of said endpiece so that substantially all of the entire surface of the endpiece is elastically deformable.

4. (Withdrawn) The tool of Claim 1, wherein said endpiece includes both a supple part including said elastically deformable ring and a rigid part secured to said supple part, and said rigid part including means for removably connecting said endpiece to said distal end of said handle rod.

5. (Withdrawn) The tool of Claim 4, wherein the rigid part of said endpiece is constituted by a metallic insert secured to said supple part.
6. (Withdrawn) The tool of Claim 4, wherein said supple part includes a generally hemispherical base to which said elastically deformable ring is elastically connected.
7. (Withdrawn) The tool of Claim 1, wherein said elastically deformable ring includes a plurality of petals, said outer and inner faces of said elastically deformable ring being respectively constituted by outer and inner surfaces of each of said petals.
8. (Withdrawn) The tool of Claim 4, wherein said rigid part of said endpiece defines a stop surface, in a longitudinal direction of said rod, for said head of said rod.
9. (Withdrawn) The tool of Claim 4, wherein said supple part of said endpiece presents at least one surface for transmission of forces between said rod and said acetabulura.
10. (Withdrawn) The tool of Claim 1, wherein said head of said rod defines a ramp surface adapted to cooperatively engage with said inner face of said elastically deformable ring of said endpiece.
11. (Withdrawn) The tool of Claim 1, wherein said handle further means for driving said head with respect to said rod in a movement of translation in a longitudinal direction of said rod.
12. (Withdrawn) The tool of Claim 11, wherein said handle further includes a sleeve disposed coaxially to said rod and at a distal end of which said head is rigidly fixed, and said means for driving said head with respect to said rod includes a grip screwed on said rod and connected in translation with said sleeve, and said sleeve being immobilized in rotation with respect to said rod.

13. (Withdrawn) The tool of Claim 12, wherein a ring member is axially interposed between said sleeve and said grip.

14. (Currently Amended) A method for positioning a prosthetic acetabulum in an anatomical or prosthetic cavity of a patient's hip, comprising the steps of:

providing a tool having a handle for manipulating the acetabulum, the handle, including a rod and a head, the head adapted to cooperatively engage an inner face of an elastically deformable ring of an endpiece that is used to grip an internal surface of the acetabulum and which endpiece is removably secured to the distal end of the handle, the elastically deformable ring including an outer surface adapted to wedge against an inner surface of the acetabulum and an opposite inner surface adapted to interact said endpiece with said handle, and wherein said handle further includes elements for applying a first force to urge said head into cooperative engagement with said inner surface of said elastically deformable ring to thereby radially expand said elastically deformable ~~deformable~~ ring with respect to a longitudinal axis of said endpiece,

placing said endpiece in engagement with said head of said handle and said head within said acetabulum and providing a first force between said head and said endpiece so as to provoke radial elastic deformation of said elastically deformable ~~deformable~~ ring to thereby grip said acetabulum by said endpiece,

positioning said acetabulum in said cavity of said patient's hip,

applying a second force along said handle to cause said acetabulum to seat within said cavity of said patient's hip,

disengaging said head from said endpiece and releasing said first force to allow said elastically deformable ring to recover to a non-expanded configuration, and

withdrawing said endpiece from the positioned acetabulum.

15. (Previously Presented) The method of claim 14 including the additional steps of

providing a plurality of endpieces having different sizes, different geometric configurations, or both,

selecting an endpiece from said plurality of endpieces that closely matches said inner surface of said acetabulum and securing said selected endpiece to said distal end of said handle.

16. (Previously Presented) The method of claim 14, wherein the elements for applying the first force to the head include a threaded portion on the rod, a grip screwed on the threaded section and a movable sleeve fitted between the grip and the head so that the head is positioned on the rod by rotating the grip on the threaded portion of the rod to move the sleeve to different positions on the rod.

17. (Previously Presented) The method of claim 16, wherein the first force is applied by rotating the grip to move the sleeve toward the endpiece secured to the tool.

18. (Previously Presented) The method of claim 14, wherein the endpiece includes a supple part and a rigid part secured to the supple part, wherein the rigid part includes structure for removably securing the rod to the endpiece.

19. (Previously Presented) The method of claim 18 wherein the rigid part of the endpiece includes a tapped section adapted to be secured to a threaded section on a distal end of the rod.

20. (Previously Presented) The method of claim 19 wherein the endpiece is secured to the rod by screwing the threaded section on the distal end of the rod into the tapped section of the rigid part of the endpiece.

21. (Previously Presented) The method of claim 14 wherein the tool includes a knob fixed to a proximal end of the tool.

22. (Previously Presented) The method of claim 21 wherein the second force is an impaction force applied to the knob fixed to the proximal end of the tool.

23. (Currently Amended) The method of claim 14 wherein the deformable ring includes a plurality petals where inner and outer surfaces of the deformable ring are constituted by inner and outer surfaces of the petals.

24. (Previously Presented) A method of positioning a prosthetic acetabulum in an anatomical or prosthetic cavity of a patient's hip, comprising the steps of

(a) contacting the prosthetic acetabulum with a tool having a head movably mounted on a rod adapted to engage an endpiece removably secured to the rod, wherein the endpiece includes an elastically deformable ring having an inner face adapted to contact the head and an outer surface adapted to contact an inner surface of the prosthetic acetabulum;

(b) forcing the head into engagement with the deformable ring to radially wedge the outer surface of the deformable ring against the inner surface of the prosthetic acetabulum to secure the prosthetic acetabulum to the tool;

(c) positioning an outer surface of the prosthetic acetabulum in a cavity in a patient's hip;

(d) applying a force to the tool to seat the prosthetic acetabulum in the cavity;

(e) releasing the head from engagement with the deformable ring to allow the deformable ring to unsecure the prosthetic acetabulum from the tool;

(f) withdrawing the tool from the positioned prosthetic acetabulum.

25. (Previously Presented) The method of claim 24 further comprising the step of selecting the endpiece from a plurality of endpieces, wherein the selected endpiece closely matches the size of the inner surfaces of the prosthetic acetabulum.

26. (Currently Amended) The method of claim 25 further comprising the step of securing the selected endpiece to the rod by screwing a threaded section on the distal end of the rod into a tapped section in a ~~the~~ rigid part of the endpiece.

27. (Previously Presented) The method of claim 24, wherein the step of forcing the head into engagement with the deformable ring includes rotating a grip screwed on a threaded section of the rod in a first direction to urge a movable sleeve fitted between the grip and the head toward a distal position on the rod.

28. (Previously Presented) The method of claim 24 wherein the step of withdrawing the tool from the positioned prosthetic acetabulum includes rotating a grip screwed on a threaded section of the rod in a second direction to urge a movable sleeve fitted between the grip and the head toward a proximal position on the rod.

29. (Previously Presented) The method of claim 24 wherein the step of applying a force to the tool to seat the prosthetic acetabulum includes applying an impaction force to a knob fixed to a proximal end of the tool.

30. (Previously Presented) The method of claim 24 wherein the deformable ring includes a plurality petals where inner and outer surfaces of the deformable ring are constituted by inner and outer surfaces of the petals.

31. (Previously Presented) A method of positioning a prosthetic acetabulum in an anatomical or prosthetic cavity of a patient's hip, comprising the steps of

(a) providing a tool having a handle that includes a rod having a threaded medial portion and a threaded distal portion, a movable sleeve adapted to move in distal and proximal directions on the rod, a grip adapted to rotate on the threaded medial portion of the rod to move the sleeve, a movable head adapted to move in distal and proximal direction on the rod and to engage an inner surface of an endpiece, and an endpiece having an elastically deformable ring mounted on a rigid part that contains a threaded portion to secure the endpiece to the rod, wherein an outer surface of the deformable ring is adapted to engage an inner surface of a prosthetic acetabulum when the head is forced on an inner surface of the deformable ring,

(b) placing the endpiece of the tool into the prosthetic acetabulum,

- (c) forcing the head into the inner surface of the deformable ring by rotating the grip in a first direction to radially expand the deformable ring to an expanded configuration and secure the endpiece in the prosthetic acetabulum by gripping the inner surface of the prosthetic acetabulum with the outer surface of the deformable ring,
- (d) positioning the prosthetic acetabulum in a cavity of a patient's hip,
- (e) applying an impaction force to the tool to seat the prosthetic acetabulum in the cavity,
- (f) disengaging the head from the inner surface of the deformable ring by rotating the grip in a second direction to allow the deformable ring to recover to a non-expanded configuration, and
- (g) withdrawing the tool from the prosthetic acetabulum.

32. (Previously Presented) The method of claim 31 further comprising the step of selecting the endpiece from a plurality of endpieces, wherein the selected endpiece closely matches the size of the inner surface of the prosthetic acetabulum.